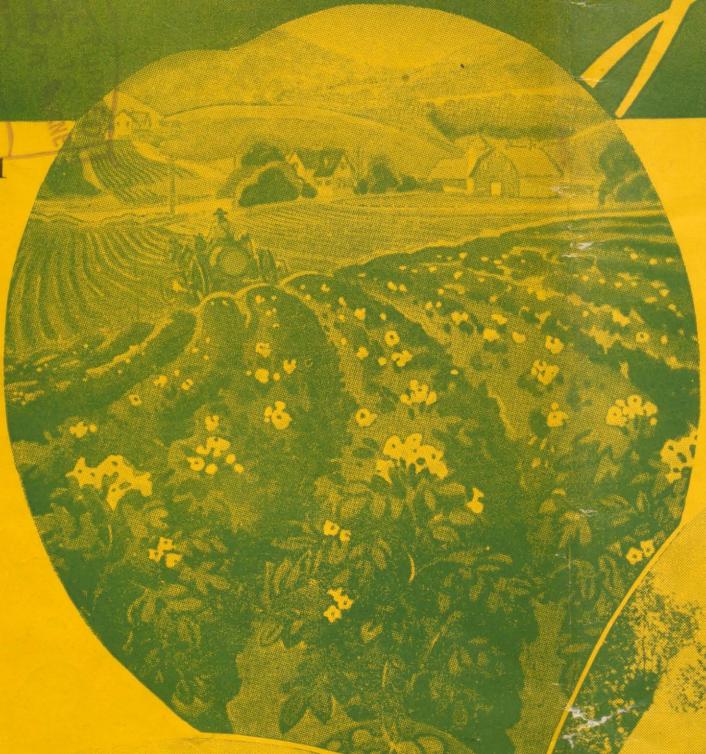


The MACDONALD COLLEGE *Journal*⁺

Vol. I • No. 1

SEPTEMBER 1940



Farm • Home • School



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EDITORIAL COMMENT

In This Issue

It is probably true that farmers have not been told in detail just what Canada expects from them in the way of a war effort. This lack of information is not due to inefficiency on the part of our government officials, but purely and simply to the impossibility of foreseeing events in these times when every day brings news of further changes in the European situation. However, some definite recommendations can be made, and the more important of these will be found in the article on the Ottawa conferences in this issue.

Stock feeders will be particularly interested in a new bulletin, *Balanced Rations*, which is described in the government section.

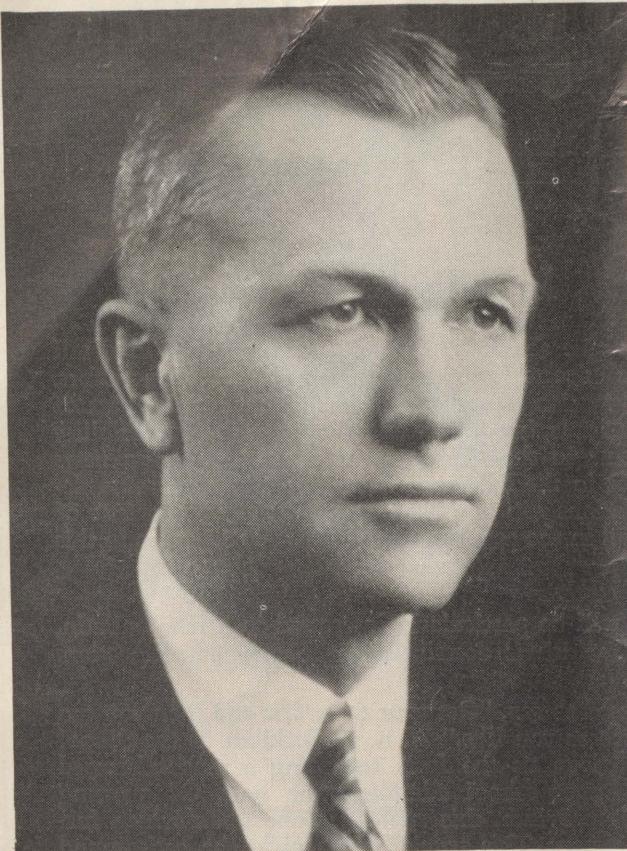
Mark Twain used to say, "Get your facts first and then you can distort 'em as much as you like." A. R. B. Lockhart of the School for Teachers has given us the facts regarding a much-discussed question — the larger school administration unit. Of growing importance in this province, this subject is one upon which full information is necessary. This article, which gives the background of the idea in Great Britain and its acceptance in Canada will provide a useful basis of discussion. Read it for yourself and talk it over with your friends.

Miss McCready, Head of the School of Household Science, has been in Montreal all summer helping out with the reception of children sent over from England. With Miss Rorke, also of the School of Household Science, she has written an interesting account of her experience for the Journal.

Also included in this issue is a rousing article by Dr. Brittain challenging us to look ahead even beyond the war effort; a timely discussion by Professor Hamilton on the situation confronting the organizers of our local fairs and exhibitions; and, following our policy of devoting a considerable amount of space in each issue to problems of the farm, four helpful contributions by other members of the college staff.

A New Feature

Beginning with the next issue the Journal will open a page for correspondence, questions and comment on matters of interest to its readers. Members of the college staff are always willing to answer questions about farm problems and when these are of general interest the Journal will publish them. Members of boys' and girls' clubs have ideas and questions. Send them in. Women are concerned about problems of the home and of housekeeping. The Journal will try to help with them. Write about them—and the questions with the answers will appear in the following number.



Greetings from Dr. Barton

I learn with much interest and satisfaction that arrangements are being made for the publication of a Macdonald College Journal to replace and extend the service rendered by the Journal of Agriculture formerly edited and largely contributed by Macdonald College staff and discontinued some time ago. The old Journal was a distinctive publication and equalled by few others in the agricultural field as a source of authentic information. I feel sure the new one will set no lower standard and that it will contribute effectively to rural welfare and will be welcomed particularly by the English-speaking element in the Province of Quebec as a publication of immediate interest and help to them.

G. H. S. BARTON,

*Deputy-Minister of Agriculture,
Ottawa.*



A Message from the Maritimes

The decision of the faculty of Macdonald College to publish a journal devoted to the interests of rural life in Quebec and for circulation among the English-speaking population has indeed been a wise one. I am sure the excellence of the first issue will bespeak for the new publication all the support it will need in the future.

I have been particularly struck with the care which has been exercised by the Editors to cover all phases of rural life in the articles and comments appearing in the first issue. So often our so-called rural journals neglect some of the most vital factors in the development of a complete rural life. The first issue of your magazine might well inspire the suggestion that the motto for its career should be "Design for Rural Life".

May all success attend this new venture. The Editors have the best wishes of myself and the staff of the Nova Scotia Department of Agriculture and Marketing.

JOHN A. McDONALD,
*Minister of Agriculture and Marketing,
Nova Scotia.*

PROGRESS

by W. H. Brittain

MANY people regard progress, particularly economic and social progress, as a natural and inevitable condition of human affairs. This is a fallacy. During long periods of the world's history there was actual retrogression. We are told, for example, that meat, which was a staple element of diet in the working class in the days of Queen Elizabeth, gradually became more scarce, until it had actually disappeared from the working man's table by the time of the Industrial Revolution, only to reappear in comparatively recent times. Throughout the 18th century the expansion of industrial production is said to have done little more than keep pace with population increases. But agricultural production did not even do this. "The glittering facade of civilization and learning of the much belauded eighteenth century conceals from view the intensified sufferings of the hungry poor who have left no record of their lives." (Colin Clark). Some even contend that the level of productivity in classic times was not far different from that which prevailed at the middle of the nineteenth century. If this be true, it took the world over two thousand years and thousands of discoveries in applied science, simply to recover the level of economic welfare attained in long past centuries. It is true that a higher standard of living has become diffused over a wider area of the earth's surface than ever before. But we must remember that, during the past century, only northern Europe, America, Australia and Japan have made genuine, striking and continuous economic progress. It is still true that more than half the total world population is sunk in a state of poverty that few of us can even imagine.

It would be easy to bring together evidence to show that, in the long and troubled history of man, there have also been many periods of moral and cultural decline. Are we sure that we in Canada, in addition to our direct war effort, indeed as a part of it, are doing all we can to build up our moral as well as our material forces?

We cannot expect the new world that will emerge from the ashes of the old to be an easy place to live in, but we who believe we possess the true gospel of living must be prepared to sacrifice some time, some interest, and some effort to awakening the struggling or dormant community life of our rural areas — almost destroyed by the impact of the machine age. Addressing the people of France Mar-

shal Petain said, "Our defeat was due to our laxity. The spirit of enjoyment destroyed what the spirit of sacrifice had built." Do we desire to deserve the same melancholy epitaph? Yet can we truthfully claim that there has existed among ourselves in the past the same spirit of enthusiasm for the system for which we claim such superiority? Throughout the years of economic depression there has been burned into our consciousness the fact that an impoverished agriculture cannot support the industries of the country. Do we realize with equal clarity that a culturally and spiritually impoverished rural population may be equally fatal to the progress of any people? And are we prepared mentally and materially to resist the internal forces that threaten us with disintegration?

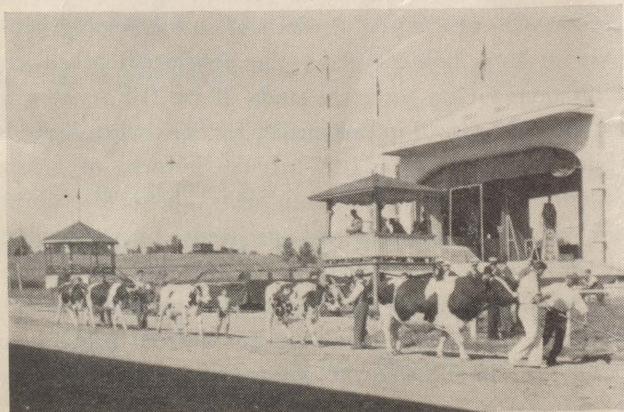
In the years preceding the second Great War economic nationalism, in one form or another, was the most significant feature of that period. It aggravated other forms of nationalism. It provoked other ills. Its effect upon international relationships was completely disastrous. The same insidious disease operated to poison internal conditions within the national boundaries of certain states. In some of them national unity was undermined; in others it contributed to or resulted in the destruction of national existence. Even in Canada we were not entirely free from this affliction. We are now happily all united in a great crusade. But none of us can predict the strain and stresses that will develop with the coming of peace to a world with all its activity geared to the processes of war. Under such conditions the dark forces of disunity may well find their opportunity! We must work and plan to combat those forces, even while we fight the enemy that is without the gate. We want no "depressed classes" in Canada. We cannot relax our external defences, but we must also build up our internal ones. Surely we have seen enough examples in recent history of the baleful effects of such crowning stupidities as have brought about the destruction of ancient civilizations in less fortunate lands. If we fall a victim to this madness we will indeed qualify for the verdict, "suicide while of unsound mind." When the interests of groups clash, it is better to create than to fight — better to establish new values than to destroy old ones, better for the conflicting interests to unite their forces and erect a structure together that shall be the strength and protection of all. If we are to lay the foundation for ordered progress in Canada, we must make the attainment of national unity our primary goal!

The Future of the Agricultural Fair

by L. H. Hamilton

THE County Agricultural Fair must continue" is a statement recently made by a leader in agriculture, and is both arresting and thought-provoking. It is arresting because the continuance of the Fair is a thing usually taken for granted; it is something to attend; a place to go to meet one's friends, to see the midway and perhaps to learn something of what is going on. The thought that the Fair might be discontinued at once emphasizes the importance of this institution. During this period when every item of expense, both public and private, is being questioned, it is necessary to ask ourselves, "What is the value of the Fair?"

The policy of our governments towards fairs has been fairly definitely defined. It is to support the Provincial and National fairs and exhibitions as far as possible and to do away entirely with grants to the smaller ones. In other words, they classify the importance and value of fairs from the top down. This may be because of the amount of money involved, or because of the greater benefit of the larger fair, or both. President Roosevelt, in opening the 1940 World's Fair at New York said, "The World's Fair is a symbol of international common sense. Fairs have been means of communication between peoples for at least fifteen centuries. They have often served to keep lines of communication open when disorder, war, or other misfortune closed other channels." At the same time Grover A. Whalen, President of the Fair, said in part, "The Fair will bring all Americans into a more unified and harmonious relationship. People on their way to New York will see America for the first time; they will get a true perspective of their own country, they will visit the spots that heretofore they only read about. It is true that New York City will be the Mecca, but the trails will wind through every state in the Union."



These statements by such outstanding men are impressive. They emphasize goodwill, new knowledge and exchange of ideas. These are very important and in Canada they may perhaps be even more important. With such a wide frontier, and such a variety of climatic and social conditions it is necessary to be brought together, to understand one another, to see new things, to gain new ideas. Each section of society has an opportunity to assess and judge the other. City people discover new things about farmers, and farmers learn something new about city-folk. Farmers from all sections of Canada meet to exchange ideas and discuss problems. They have an opportunity to compare their standards of achievement with the best, whether it is in livestock or crops; in production equipment or fertility practices. Thus it is that we hesitate to limit our national fairs and exhibitions.

On the other hand, some say that with our newer methods of communication this is not necessary. The radio, the press, and the automobile, have brought people closer together than ever before. Some believe that our larger fairs have been supported by professional rather than practical farmers; that a good deal that goes on is artificial and that it would be better to support the smaller provincial or, better still, the county fair. Through the provincial and county fair practical lessons or ideas can be grasped by a larger number of people and are more likely to be applied. They avoid the possibility of communicable disease and the transfer of pests from one section to another.

I had an opportunity the other day of speaking with the secretaries of a number of county or regional agricultural societies in Quebec. They were all very loth to see their fair abandoned even for only one year. Most of these have debts on which interest must be paid. They believe that the membership will fall off and that it will take a considerable time to re-build. They are anxious to carry on even though the grant is cut, but they cannot do so without help.

That is the problem. Perhaps the only satisfactory solution will be found by experiment. So long as we must compete on world markets, whether so-called surpluses are real or only apparent, we must aim to produce the best in the most economical way and market it in the most approved fashion. If the fair or exhibition, large or small, does really influence our production and marketing standards as it is claimed, the question of whether or not the fair should continue is worthy of careful consideration.

Food for War Guests

by Margaret S. McCready and Ruth B. Rorke

THROUGH the generosity of McGill University, Royal Victoria College was one of several institutions in Montreal made available for housing and feeding British children and mothers en route to homes in Canada and the United States "for the duration". The work was carried on by well-organized volunteer help except for some of the essential services that had to be manned by the regular staff. The chief difficulties arose from not knowing exactly when the boats would arrive and the number of persons to expect.

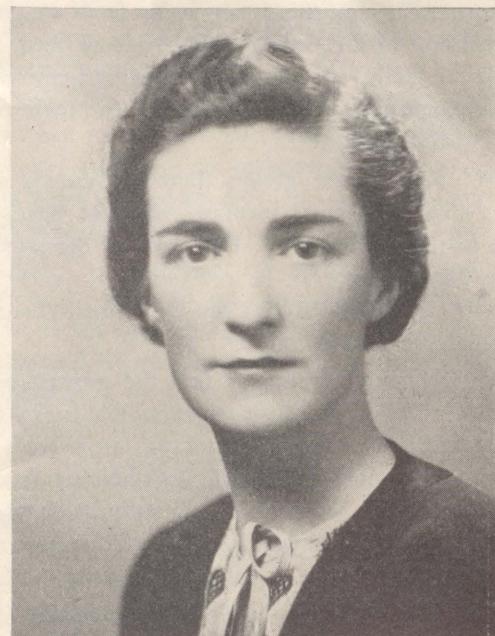
The volunteers in charge of feeding found the experience with the British children most stimulating. Many came off the boats with upset stomachs but very ready to eat, occasionally with disastrous results! Some mild infection seemed to be passing among the newcomers and a considerable number of special diets were ordered by the doctors and nurses attending the sick people.

We had decided to have a three meal per day schedule and were highly amused on the first Sunday to find seventy-five of the child guests trying to work in their four meal British schedule! The volunteers in charge of play activities had arranged a picnic to the McGill park. A good-sized picnic supper was prepared for each child and a donation of Honey Dew provided liquid refreshment. The children finished supper at about 5.30 p.m. and when they returned to the college shortly afterwards we found them thronging into the dining-room for the supper prepared only for the adults and babies. The children insisted that they only had their tea at the picnic and were ready for a salad supper!

Their reaction to tomato juice was interesting. The mothers seemed to enjoy it but had to use a great deal of persuasion with the children, most of whom had never tasted it before. The second time of serving this beverage food, results were much better. Somewhat the same situation arose with a smaller group of refugees to whom we served a hot supper dish, succotash, a mixture of canned yellow corn, beans, tomatoes and onion. The adults relished this tasty new food but the children were wary of it. Corn, to the average Britisher, is just chicken food! However, there was not the slightest doubt about the high regard in which our ice cream was held!

We were surprised at the lack of appetite for our lovely, green, slightly-cooked cabbage served as a vegetable at the first dinner. Perhaps it did not have quite the same flavour as the English variety? We mixed the raw, shredded cabbage in with our salad bowls and found it disappear without trouble although cole slaw, as a separate salad dish, is not by any means a British institution!

It was interesting to hear the comment regarding our "rich milk". We were serving homogenized milk with the fat globules finely dispersed to prevent the cream separating.



MISS McCREADY

A few mothers did not allow their children to drink it, thinking it too rich! In reality, the fat content was only normal and the same as that supplied in English milk. If our charges had remained with us long enough we could have accomplished some good nutrition teaching. As it was, we attempted with the help of the very interested volunteer waitresses to influence the older sisters and brothers who were commonly in charge of smaller children, to encourage more milk drinking and porridge eating, etc.

We were requested constantly to supply the packaged breakfast cereals instead of hot rolled oats. The old refrain about porridge being heating to the blood had to be counteracted repeatedly. We had a good argument, too, in the fact that the packaged cereals would cost us more than twice as much as the easily cooked, whole grain and therefore more valuable hot cereal.

An excellent food which we kept on hand for emergencies was a fine green and yellow pea soup powder. Vegetable juices or meat stock or milk could be heated, the pea powder added and the whole served immediately — a much more useful soup preparation than the long-cooking dried pea variety.

With the war casting a dark shadow ahead, it is possible that many opportunities for helpful service to war guests will come to household science graduates and housekeepers in Canada. Now is an appropriate time for all Canadians interested in better health through good feeding to give more attention to getting the best food value for money expended.

Swine Feeding

by E. W. Crampton

PART II.—SWINE FEEDS

AS seen in Part I of this series, swine feeds are grouped according to the principal use made of them in the ration. Basal feeds, for example, supply chiefly energy; protein supplements are used primarily for their protein content; and so forth.

Within each of the groups there are usually several feeds — alike in general feeding value but nevertheless different in specific features. Thus feeds of the same class or group may, in general, be substituted for each other, though such exchanges always result in small changes in the value of the final ration.

Among the basal feeds, we find the greatest number of substitutes. There seems little doubt but that barley should be ranked first among the farm grains as a pig feed. Corn, wheat, oats, screenings (No. 1) and hominy feed may replace a part of the barley in the pig ration with relatively small effects on the feeding value of the ration as a whole. It should be pointed out, however, that barley is officially graded into three grades. Of these No. 1 and No. 2 feed barley are to be very much preferred to the No. 3 grade. Samples of the latter grade usually contain between 15 and 20% of wild oats and weed seeds which decrease the feeding value of the barley quite definitely. In general, barley should seldom make up less than half of the basal feeds used. Because of their fibre content, oats should seldom form more than one-third of the basal feeds.

Of the high-protein feeds, we find meat meal, fish meal, linseed oilmeal and soybean oilmeals as the principal feeds other than the dairy by-products, skimmilk, and buttermilk. Either meat meal or fish meal may constitute the entire protein supplement, but usually somewhat more satisfactory results will be obtained if a mixture of two or more high-protein feeds is used, excepting again in cases where enough skimmilk or buttermilk is available to use three pounds to each one pound of basal feed mixture. Care must be taken in the selection of fish meal for pig feeding that the fat content of the sample is not unduly high. Fats from fish meals if used in excess cause soft pork which, of course, is objectionable on the market. Furthermore, fish meals which contain much in excess of 6 or 7% fat are frequently of poor quality or made from stale fish scrap and as such may impart a fishy flavour to the pork. It should be noted that low fat contents should also be considered in connection with soybean oilmeal, and attention is called to the difference between soybean meal, which is merely ground soybeans, and soybean oilmeal, which is the residue of soybeans after the extraction of oil.

The feeds usually involved in the mineral supplement of the pig ration are: ground limestone, to supply calcium; feeding bone meal, which supplies both calcium and phos-

phorus; common salt; ferric oxide or ferrous sulphate (copperas); and potassium or sodium iodide. Listed on the tags of many commercially prepared mineral mixtures one may find other ingredients, but it seems probable in the light of experimental evidence that the regular use of materials to supply other minerals than those above noted is quite unnecessary. In particular may be questioned the practice of including drugs which are supposedly of benefit in combating intestinal worm infestations. The requirements of the pig for salt appear to be somewhat less than those of ruminants, and a mineral mixture for pigs should seldom contain more than 25% salt. The other three-quarters of the mineral mixture might satisfactorily consist of two parts feeding bone meal and one part ground limestone. The amounts of iron and iodine are very small but nevertheless important. To each 100 pounds of the salt-bone-meal-limestone combination the addition of two pounds of ferric oxide or ferrous sulphate should provide enough iron, and two ounces of potassium or sodium iodide enough iodine.

Among the vitamin supplements, cod liver oil or some other fish oil has been a standard source of vitamins A and D for pig rations. Under present conditions, it is becoming increasingly difficult to obtain satisfactory samples of these materials. Pilchard oil and halibut liver oil are substitutes for cod oils, though because of different potencies should be fed at levels needed to provide the quantities of vitamins necessary. During the summer little attention need be paid to special sources of vitamin D if the pigs are allowed outdoor quarters in direct sunshine. Green pasture during the summer will also provide considerable quantities of vitamin A. These latter sources of vitamins A and D, however, are not available during the winter which naturally increases our dependence on fish oils.

Recent evidence points clearly to the fact that swine rations, especially those for young pigs, are much improved by supplements carrying vitamin B. It seems probable that the inclusion of from 3 to 5% of brewers yeast in young pig rations is well worth while. Increased rate of gain and probably greater thrift and vigour in the weanling pigs may be expected from the use of some source of vitamin B. The swine feeder need not concern himself in so far as we are at present aware with any special supply of vitamin C nor with vitamin E, though evidence concerning the latter is not too firmly established.

The next article of this series will discuss in some detail the feed requirements of various classes of pigs. Further discussion of the amounts of minerals, vitamins and proteins which should be used in pig feeding will be deferred until the requirements of the animals are more specifically discussed.

Improvement of the Meadow

by J. N. Bird

BARE fields in early fall and empty barns in the spring mean a feed supply which is not sufficient for the number of livestock kept. If a herd is to give the best returns from winter feed, it must go into the stable in the fall in good condition. When turned out in the spring, it must also be in good condition if it is to make the best use of the low-cost, high-quality feed which pasture provides. A constant aim of all good farmers is to supply the feed requirements of their livestock with home-grown feed of high quality.

Where the acreage of meadow forms a large part of the cultivated land, as it does in Eastern Canada, one of the most hopeful ways of increasing the home-grown feed supply is by the improvement of meadows. There are several ways of doing this. It may be done by the use of more suitable seed mixtures, better seeding methods, or better fertilizing practices. One of the most important is that of top-dressing with manure in the fall.

Top-dressing with Manure

As a general rule manure should be used on those crops which yield the highest cash returns for its use. Thus, it is usually applied to cultivated crops like silage corn or the root crops which furnish a large tonnage of high-quality feed per acre. But where the green tonnage from the meadow compares favorably with that from a cultivated crop, like silage corn, it may be more profitable to apply at least part of the manure to the meadows.

Where manure is available for this purpose, the new seeding should receive the first consideration. If the stand is rather poor and the growth short, a light top-dressing applied in early fall may be just what is needed to thicken up the stand and provide a good top growth for the winter-protection of the clover. The need may also depend, to some extent, on the crop which the new seeding follows in the rotation. If the grain crop, with which the new seeding is made, follows a cultivated crop which has been manured, it is unlikely that a top-dressing will be necessary. On the other hand, if it follows a grain or sod crop which has not received any manure, there may be a special need for such treatment.

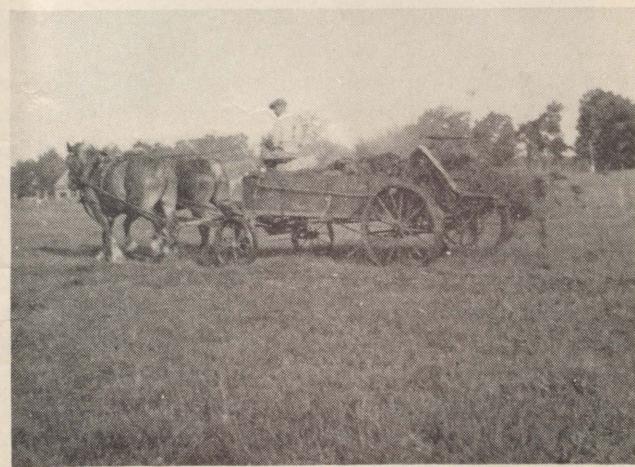
Since the clover in the new seeding comes along the most rapidly during the first year, it would be expected to receive the greatest benefit from the top-dressing. Later on, some of this beneficial effect upon the clover is passed on to the timothy which is usually seeded with it. The result is that a good crop of clover is usually followed by a good crop of timothy and the influence of the top-dressing on the new seeding may be noted both on the clover and the timothy. A timothy meadow from which one crop of timothy

has been taken quite often responds well to a top-dressing of manure. It is more likely to remain in a vigorous condition and provide larger yields of higher-quality hay if crops of hay are taken in later years. It should also furnish much better grazing if the meadow is later used as pasture.

The effect of the top-dressing on the timothy sod will depend to some extent upon the rainfall and the moisture in the soil. Dry weather in mid-summer may greatly lessen the aftermath and the grazing obtained from a timothy meadow in late summer and early fall. On the other hand, a top-dressing of manure enables more of the soil moisture to be held close to the surface of the soil where it can be of the greatest benefit to plants.

An Autumn Job

Top-dressing of meadows is a job for the autumn months right up until winter when the snow may become too deep. Fresh manure, direct from the stable, may be used and for this purpose may even be better than rotted manure.



The weed seeds which are present in fresh manure and give trouble when such manure is applied to cultivated crops or grain seldom make much of a showing in the meadow. The grasses and the clovers in the sward make good use of the liquid portion of the fresh manure. Most of the weeds which are able to get started run the chance of being checked or killed by winter conditions or by the mowing or grazing of the following year.

There are some advantages in putting on a light but well-spread dressing. A light application makes it possible to cover a large area with the manure at hand. In order to ensure good spreading, the use of a manure spreader is very advisable. An even spreading tends to increase the effect of the light application and to guard against any smothering effect upon the clover. It also allows the manure to work

Common Storage of Vegetables

by H. R. Murray and J. G. Coulson

STORAGE is a cheap and satisfactory way to keep vegetables for home use during the winter months. It is cheaper, more convenient, and requires less careful work than canning. Also, most homes are suitable for storage, since it requires only the use of some space in the cellar, the attic, or a large closet, depending upon the product to be stored.

It is very important to start with a good product of the right variety, and to have reasonably favourable temperature and humidity in the storage room. With certain vegetables, the stage of maturity at harvest time is also an important item. For instance, beets, carrots, parsnips, turnips and salsify should not be allowed to mature fully, as they become woody with age. They will keep just as well, but they will not be as good for eating as they would be if harvested earlier.

On the other hand, vegetables such as onions, squash, pumpkins and cabbage will not keep well even under the best conditions unless they have matured fully before being put in storage.

Except for squash and pumpkins, the nearer to freezing (32°F .) one can safely keep the temperature the better it is for vegetables. This applies particularly to carrots, beets, parsnips, celery, turnips, cabbage and onions. Potatoes are somewhat different, however, and should not be stored below 34°F . nor above 40°F . Temperatures lower than 34°F . may make the potatoes sweet, and they will have to be held for some time in a warm place before they can be used.

Storage conditions recommended for the various vegetables are as follows: *Cool and moist* — beets, carrots, parsnips, celery, turnips. *Cool and moderately moist* — cabbage, brussels sprouts, cauliflowers, potatoes. (Enough moisture present to prevent wilting but not enough to allow free water to accumulate on the surface). *Cool and dry* — onions and garlic. *Warm and dry* — squash and pumpkins.

All root crops can be stored in a simple pit outside or kept in a pile on the floor of a cool moist cellar. If the conditions are dry, such as we find in concrete cellars, cover roots with moist sand or soil to prevent shrivelling through a too-rapid loss of moisture.

Onions may be kept in an attic or on shelves in a cool, dry part of the cellar. Dairy products such as cream, milk and butter should not be kept near onions or cabbage, as they are likely to absorb odours. Care should also be taken to see that these odours do not penetrate to the living quarters of the house.

A cellar under the house or some out-building is the best storage place for most vegetables, provided suitable temperature and humidity conditions can be maintained. Where the cellar contains a furnace it is best to partition

off the portion to be used for storage. The storage room should have at least one small opening to the outside to admit air and to provide temperature control. This should be kept open all the time unless there is danger of the room getting too cold.

Outdoor Storage

Where little or no cellar space is available, outdoor pits should be used to store the root crops or cabbage. A slight elevation where the soil is sandy or gravelly or at least well drained should be chosen for the pit or trench. All drainage should be away from the spots chosen. A shallow ditch around the pit, with the opening on the lower side, will help drainage. The commonest method of storing root crops and cabbage is to dig a shallow pit (10 to 12 inches deep), which is then lined with about 6 inches of straw or hay. The product to be stored is placed on this straw in a conical heap 2 feet to $2\frac{1}{2}$ feet high, over which is placed a layer, 6 to 8 inches thick, of the same strawy material. Sufficient soil is then placed over this to hold it in place and to shed the water. As the weather gets colder more soil is added to prevent freezing. If there is plenty of snow in the winter, 6 to 8 inches of material is enough; but if the snowfall is light, more straw and soil will be needed. A tuft of hay or straw should be left sticking through the top of the pit for ventilation.

The size of the pit depends on the quantity of produce to be removed at one time. Several small pits are better than one large one, since the entire contents of a small pit may be removed when it is first opened. Where several root crops are to be stored, it is better to store a few of each kind in different compartments of the same pit rather than keep them separated, because this gives a variety without opening several pits. It also makes it possible to remove the entire contents of a pit without having too large a quantity of any one product.

Guarding against Rot

Measures should be taken to keep losses from decay and rots as low as possible. Store only vegetables which are free from disease, mechanical injuries, frost damage and other blemishes. Harvest when the soil is dry, for dirt clinging to the produce may lead to early decay. Great care should be taken to keep the storage room hygienically clean by removing all debris at the end of the storage period and cleaning the room and equipment thoroughly. Frequent inspections should be made during the storage period and any decaying specimens should be removed. The room should have proper ventilation and the produce should be so placed that air can circulate properly. Humidity should be high enough to prevent wilting but not so high that free water will be present, which helps to start decay.

Apple Maturity

by R. J. Hilton

A PRACTICE often followed in Quebec is to pick early apples as soon as they are large enough to sell, but it is easy to overdo this early picking and to pick the fruit before it is really ripe enough to stand a few days of common storage without shrinking. Size and good colour should both be used as a guide to the proper time for picking.

With an early variety such as Yellow Transparent the ground (or basic green) colour of the apple is the guide, and most growers learn to recognize the maturity of this variety by the amount of yellowing which appears as the apple ripens. The over colour (blushed, striped, or solid red), which is a selling factor with early varieties like Crimson Beauty, Early McIntosh, Lowland Raspberry and Melba, depends to some extent on ample sunlight and cool, crisp nights. Night temperatures this summer have been rather high with high humidity and in many districts in Quebec early apples are not colouring well. As a result, the ground colour is being used as a more reliable guide to maturity.

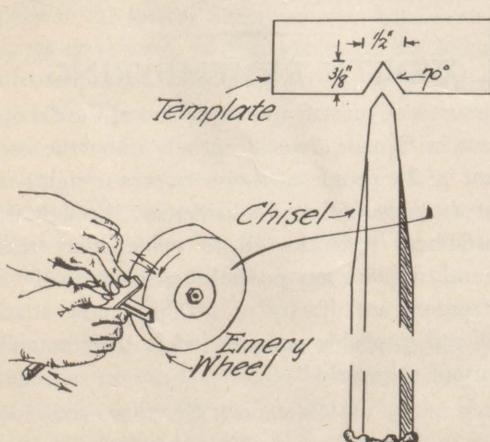
For the most economic yield all early apples should be spot-picked. That is to say, several pickings are made, only those apples which are really mature being taken each time, the others being left to ripen on the tree. Removing the fully developed fruit from time to time allows the smaller apples remaining on the tree to develop more rapidly, and this means a larger total crop.

It is not usual to spot-pick later apples such as Wealthy, Fameuse and Cortland, but two pickings are often made



of McIntosh, since this variety has the bad habit of dropping unevenly during the ripening period.

Growers would do well to remember that trying to get ahead of the other fellow and to get better prices by picking too early often results in shrivelled fruit and the loss of future good will in the markets.



GRINDING A COLD CHISEL

GRINDING COLD CHISELS

For general work cold chisels should be ground with the faces of the cutting edge making an angle of about 70 degrees with each other. When thin or soft metal is to be cut the point can be sharper. To get the correct angle a guage can be made from a piece of tin as in the diagram.

When grinding, hold the chisel firmly in the right hand with the first finger underneath and next to the grinder rest. Press the cutting edge of the chisel against the wheel with the fingers of the left hand, and swing the handle back and forth with the wrist of the right hand to give the point a slight curve. Be sure to dip the chisel in water frequently to keep it cool, for heating will spoil the point by making it soft.

COOPERATION AND MARKETING

A page of interest to the members of farmers' cooperatives.

WHAT IS A COOPERATIVE?

MANY Canadian farm men and women have turned to the Co-operative movement. Many others are now inquiring, "What is it that co-operatives are particularly fitted to do? What is their place among the various institutions and organizations serving farm interests? Can they do the whole job, as is claimed by some of their more ardent supporters? If not, how far can they go, and what other means of action are needed to arrive at desirable farm objectives? Or have co-ops. little place in Canadian life?" Before arriving at answers to these questions, it is necessary to inquire, "What is a co-operative? How many different kinds of co-operatives are there and what do they do?"

Co-operation has been defined in these words: 'A co-operative enterprise is one which belongs to the people who use its services, the control of which rests equally with all its members, and the gains of which are distributed to the members in proportion as they make use of its services.' All true co-operatives have certain features in common which distinguish them from ordinary businesses operated by individuals or corporations. True co-operative enterprises stick to the principles worked out by the Rochdale weavers a century ago, the chief of which are: open and voluntary membership, one man one vote, patronage dividends rather than profits on investment. These principles have proved sound through a hundred years of application, and experience shown that when departures from them are made difficulties may arise, or at least less benefits are obtained for members.

True co-operative enterprises are owned by the people who use them and are managed in their interests. Profits do not go to a separate group of people who are concerned with the business chiefly as owners, but to all the users who have jointly undertaken the affair, in proportion to their use of its services. Interest on capital is set at a fixed rate; the business is not run as a speculative venture whose main returns go to the stockholders. The enterprise is democratically controlled on the basis of one vote per member, not on the basis of one vote per share of stock.

The guiding principle of co-operation is to help the common man to gain a greater measure of security through voluntary and democratic control over the various phases of production and distribution. The immediate purpose of all kinds of co-operatives is to give their members the benefits of the operations they undertake. The different types of co-operatives seek to achieve this result in different ways, and it is important to understand clearly the fundamental distinction between the two main forms of co-operative activity.

These are consumer and producer co-operatives. While the consumers' co-operative seeks to raise the standard of living of its members by lowering the cost of the things they buy, a producers' co-operative attempts to do the same thing by increasing the returns from the things its members sell. The purpose of the first is always to supply goods to its members as cheaply as possible, eliminating profits or rebating them according to purchases. The purpose of the second is to sell the goods of its members to the best possible advantage. Thus their aims tend to be opposed, and this conflict of interests must be recognized, examined and, if possible, overcome.

It is obvious that the co-operative movement has accomplished much that is of value, but it is a mistake to assume that it has established an alternative to competition. Co-operation has simply created a challenge to monopoly and seeks to eliminate many of its bad results. Its greatest contribution in the economic field is the sharpening of competition rather than the elimination of the competitive system. Therefore, co-operation will have certain very definite limitations to the extent and effectiveness of its action. There may also be dangers inherent in co-operatives themselves if they gain a monopoly in any one field.

In addition to realizing the limitations of co-operation, it is important to remember that co-operatives are based on group action. And group action is only successful as long as the members remain loyal to the principles and aims of the group. Co-operatives, like trade unions, depend on the solidarity of their membership. The advantage of the group, rather than of the individual, must be kept in mind at all times. Some people want all the advantages with none of the risks or responsibilities. Where this attitude is found co-operatives cannot succeed.

WORTH REMEMBERING

"The survival, growth and expansion of the Co-operative Movement in Canada depend entirely upon the continued enjoyment by the people of their democratic rights, and the defeat of the powers that would destroy them. It is, therefore, incumbent upon us all to make every reasonable sacrifice and to give every possible assistance to the defence of the freedom and liberty of mankind now attacked by forces of evil, probably unexampled in their magnitude in the history of the world."

—CANADIAN CO-OPERATOR, July 1940

85% of everything that is sold is sold to people earning \$35 a week or less. —CUNA EMERGES.

SCHOOL PROBLEMS AND VIEWPOINTS

THE LARGER SCHOOL ADMINISTRATION AREA IN QUEBEC

by A. R. B. Lockhart

IN educational circles the 19th century was the century in which, in all more highly civilized communities, an attempt was made to establish schools for all the children of all the people. Generally speaking, it was at the beginning of that century that schools began to be established for the children of English Protestants, who as pioneers were then settling in various parts of this province. These first schools were largely due to the enthusiasm of local communities and neighborhoods.

While some governmental assistance to various educational experiments had been given before this, and while certain government grants were made to help in the establishment of schools in the year 1829, it was not until the year 1841 that a complete Education Act was passed. Thus we will be celebrating next year the centenary of our first Education Act.

This Act and the one which replaced it in 1846 made the Protestant Committee of the Council of Education responsible for the educational policy to be pursued in the organization and administration of its schools. To the Department of Education was given, in general, the responsibility of seeing that the Education Act and the regulations of the Protestant Committee were carried out by school boards.

Among other things it was left to the local communities of school municipalities to provide through taxes and school fees a large part of the financial support for their schools.

A Century of Development

Looking down the long vista of years since 1841 one can see that many changes and many improvements have been made in the system. Improvements have been made in the courses of schools, in the quality of the teaching staff and volatile progress has been made in school buildings being erected. Since no system devised by human beings can be perfect and since change and adaptation is the order of the modern world, the time has come when we should carefully consider whether an administration system that arose from a situation greatly different from that which exists today is not capable of modernization and improvement.

Other countries, in their effort to furnish their children with superior educational facilities to those employed by their parents have turned their attention to the question of increasing the size of the administration area, as one means of offering some improvement. It may be interesting to examine some of these attempts.

The Larger Unit Elsewhere

Over 30 years ago England abandoned the small unit and now have only 313 school boards for a population of over 40,000,000, approximately one board for each 125,000 of population. Scotland with 5,000,000 people has but 36 school boards. This same process is going on in the United States where it has been adopted by, at least, 20 states.

In Canada it is in operation in the Peace River District of British Columbia. In Alberta 11 such units comprising 744 rural schools were established in January, 1937, a year later 11 more were established, while during 1939 the remaining 22 units were in operation.

Continued on page 22

THE PROVINCIAL ASSOCIATION OF PROTESTANT SCHOOL BOARDS

THE Provincial Association of Protestant School Boards was organized by a group of citizens several years ago to further the cause of Protestant education in the Province of Quebec. Mr. H. Jones of Bedford, P.Q. is the President, and Mr. A. Whitehead of Bury, P.Q. is the Secretary. About fifty school boards are members of the Association and it is hoped that many more will join and lend their support, so that the Association may be as effective as possible in its object of bettering education in this Province.

These are some of the objectives of the Association:

1. To encourage good educational government throughout the Province.
2. To educate the Protestant School Boards on the advantages of sound educational administration.
3. To inculcate throughout the population the spirit of educational co-operation.
4. To establish and maintain branches for the achievement of the purposes for which the Association is incorporated.

At an executive meeting on June 8th at which were present several members of the Protestant Committee of Education, it was noted that the proposed legislation which would permit the forming of county school boards in certain counties would not be brought up at this session of Parliament. An extensive campaign is to be launched to inform the members of the boards concerned of the purposes and aims of such organization, which will improve Protestant education in this province. It was decided that the members of the Women's Institutes, who are naturally interested in education, should be fully informed about this proposed legislation. It was also unanimously agreed to give full support to the new Macdonald College Journal.

Messages from President Jones and from other officers of the Association will appear in an early issue of the Journal.

THE WOMEN'S INSTITUTES PAGE

A section devoted to the activities of the Quebec Institutes and to matters of interest to them.

SOME HIGH LIGHTS OF WOMEN'S INSTITUTE WORK

by M. Elizabeth McCurdy

Provincial Convener of Publicity Committee Q.W.I.

A BRIEF resume of the past year, the first in its history when the Q.W.I. functioned without a Superintendent, may serve to introduce the aims and objectives of this society of rural Canadian women.

Running like a dark and sinister thread through all the activities of the nine departments of W.I. work during the past year has been the menace and reality of war, and the consequent need of co-operative effort with other interested groups. Early in September contact was made with the Canadian Red Cross, and prompt response to the appeals for the needs of the soldiers, the Navy and the refugees resulted.

Into the hands of the Women's Institutes of Quebec fell the task of the Voluntary Registration to secure a tabulation of the woman-power in the Province, and this work was efficiently carried out, forming, as admitted by high authorities, a tabulation of information which is of exceeding value.

While remembering the needs of their own country and the whole British Empire, and while hating and loathing war in all its aspects, the members of the Q.W.I. do not lose sight of the fact that there are in the enemy countries women who also hate and loathe war, and are, too, facing the loss of loved ones with aching hearts, and these are remembered in the Collect of the W.I.: *May we strive to touch and to know the great human heart common to us all.*

A significant event of the year was the granting of the franchise to women in the Province of Quebec, an event long anticipated, and hailed with pleasure and a sense of equality with the women of all the other Provinces who have had this privilege for many years. The toll of young man-power which the war is taking may easily result in added responsibility to Quebec women, an idea which merits consideration as a possibility.

In common with the other Institutes in Canada, and indeed with the entire population, the Q.W.I. felt deeply the loss by removal of their friend and patroness, the Lady Tweedsmuir. A share in the valuable and distinctively Canadian gift from the women of Canada to Lady Tweedsmuir was one of the pleasures of the past year.

The officers and members of the Q.W.I. heard with pleasure of the appointment of Miss Edna B. Rettie as Demonstrator, and offer her their cordial and loyal support, as they once again set themselves resolutely to whatever tasks and duties the future may bring.

An Appeal from the A.T.S.

Lady Ironsides, Vice-President of the Auxiliary Territorial Service, has made an appeal for assistance to Mrs. H. McGregor, President of the F.W.I.C., who passes it on to the Women's Institute members.

The women of Britain organized the A.T.S. in 1938, and they are now serving with the British forces in all parts of the United Kingdom. They work as cooks, orderlies, clerks, telephone operators, chauffeurs, etc., and are doing magnificent work. Many are living under canvas, in requisitioned empty houses and in barracks and hutments.

They need comforts — socks, scarves, gloves, bed socks and bed jackets, woollen garments and cushions. (Wooden benches make poor resting places for tired girls after a day's work.) Any donations, however small, will be gratefully received at the Collecting Office, 30 Eaton Square, London, S.W.1.

Invalid and Convalescent Cookery

by Jessie J. Williams, M.C.A.

(Condensed from "Home and Country", June, 1940)

Even in these days of wider knowledge of the possibilities and preparation of foods, a good deal of haziness exists as to the difference between invalid and convalescent cookery. It is a subject that needs special understanding now, when a heavy responsibility rests on those who are called upon to build up a patient's strength with suitable nourishment.

Invalid cookery, very simple, but needing great care and precision, means working mainly to the doctor's orders. When the patient becomes convalescent the cookery calls for more knowledge and imagination on the part of the cook. Often a "setback" is caused by feeding indigestible food.

Never offer large quantities, for after illness a patient's powers of digestion are greatly influenced by sight, and the effort to eat is often tiring. Be sure that all food intended to be served hot is really so and not lukewarm.

Never ask a patient what he or she would like. They are weak after illness, and nothing is more tiring than to have to make a decision. A dish that comes as a surprise is always more enjoyable.

School Days Again!

Once more holiday routine is changed to school routine. Are your children starting the day with a good breakfast? Are they having a good meal at noon-time?

Are they getting at least 1½ pints of milk per day? One serving of potatoes at least once a day? One serving of leafy vegetable and one serving of another vegetable a day? One serving of fruit a day?

Are they getting all the sleep they need at night?

DESIGNS FOR LEARNING

What dream shall I dream and what labour shall I undertake? I answer, "The first thing to do is to create and realize the feeling for the community and to break up the petty isolation of man from man"—AE.

The Wealth of the Nation

Angus Macdonald speaking to the Nova Scotia legislature early this year stated significantly:

"Because the people of Nova Scotia are poor, they must be intelligent."

He was asking the province to spend a considerable sum of money to finance Regional Libraries for Nova Scotia. He argued that the most dangerous poverty was poverty of ideas and of initiative, and the greatest assets of a country was the intelligence of its people. But intelligence does not

grow out of the ground unhusbanded; the seed bed must be prepared in study, and reading, thought and discussion, hence the need for libraries that are new and up to date, with books on the shelf that people will want and can use.

The main point of Mr. Macdonald's argument bears repeating. We are poor, we face problems, and poverty, and because of this we must have people with brains trained and harnessed to do the work at hand. People will only meet defeat, who are first of all defeated in their hearts.

COMMUNITY SCHOOLS, 1940 MODEL

On September 16th, the first Community School of the 1940 season will be inaugurated at the High School, Bury, Quebec, and on the following three nights schools will be launched at Ayers Cliff, Lennoxville, and Richmond.

The new Community Schools have been specially designed to fit the needs and moods of 1940. Beginning at 7:45 sharp, the schools open with community singing; then follows an hour of instruction. Students will have an interesting time choosing from the following: Motor Mechanics; Farm Problems; Dressmaking; Handicrafts; Home Nursing; Wise Buying; Public Affairs; and Character Education. After the classes will come a general session for all with sound films, special speakers, and forums. There will be forty-five minutes at the end for recreation and folk dancing.

Each night the Community School will follow a theme around which will be built posters, displays, pamphlets, songs, films, and the program of the general assembly. Some of the themes will be Education, Health, Democracy in Canada, The World Crisis, Music and Drama. There will be an open competition on selected nights in photography, thrift displays, amateur entertainment and objects of historic interest.

"Education for all the people all the time," is the slogan of this year's streamlined Community Schools. They will continue for eight weeks, and the registration is estimated at 400. The schools deserve special emphasis to-day when it is necessary that everyone should get the right amount of recreation combined with special training in skills that are needed. Most important of all will be the discussions on the problems of democracy. When a nation faces a crisis, its greatest wealth lies in the intelligence of its people.

ADULT EDUCATION NOTES

by R. Alex. Sim

DO YOU LISTEN TO:

The Columbia Broadcasting Symphony conducted by Howard Barlow, Sunday afternoons at 3 p.m.? Æ

Canadian Snapshots, Tuesdays at 9 p.m. — a dramatic presentation of Canadian places, people and events with prizes for your ideas? Æ

The Question Box: Questions and answers on music, literature, art and science, Wednesdays at 9 p.m.? Æ

Under the Big Top, stories of the circus presented by Jack Rogers — of special interest to children?

These programs are carried on all CBC stations — all times are daylight saving.

HAVE YOU READ:

A New Youth Movement, by Ethel Chapman in the August Issue of the Farmer Magazine? Æ

The Rural Co-operator, published at Duke & George St., Toronto? The latest issue is devoted to the question of Rural Youth. Æ

Notions Élémentaires de Coopérations Agricole, par Gérard Filion, Secrétaire Général de l'Union Catholique des Cultivateurs — 15 cents. This excellent pamphlet consists of twenty-five simple lessons on co-operation. Æ

Persons, Papers, and Things, by Paul Bilkey. Canada in the golden age of Laurier as seen by a newspaper man in the press gallery, Ottawa. He describes in intimate detail, accompanied by amusing sketches, the lives of the men, and the record of events that have made Canadian history in the past fifty years. To read it is to dabble pleasantly in politics. \$2.50.

Continued on next page

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Canada, America's Problem, by John MacCormac. MacCormac has written in refreshing style, about Canada for Americans. It makes good reading for Canadians who do not know Canada; it is a book of unusual value to-day since it discusses the possible revision of relations between Canada and the United States which might result from the war. A good book for study groups. \$3.25.

The above publications may be secured from the Rural Adult Education Service, Lennoxville, P.Q.

Learned by Experience

(In his addresses to the Clergy Summer School at Macdonald College last month, Father Daniel MacCormack of St. Francis Xavier University summed up four truths which were the fruit of ten years hard work in adult education.)

"We began," said Dr. MacCormack, "without precedents or definite plan to follow, but we learned. These are the things that now we are sure of."

1. That Adult Education is *necessary* to Democracy. All the wisdom of Solomon, embodied in laws, will avail little if the people are not prepared . . . Without education, our social superstructure, if it does not actually topple, will be a big body without a soul.

We harp on the 'free will of man' but we have not done much about it. We pay lip service to democracy — and that's all . . . Now we have to prove to Hitler that democracy works . . . We must really believe in the democratic way — of opposing to force the way of dynamic ideas.

2. Any system of Adult Education must tackle the economic problem. Adult Education is a preparation for complete living. None of us are so spiritual that we do not need to be concerned about making a living . . . We must begin with the muddy problem of dollars and cents if we are to lay the foundations for the building of culture and beauty. We need good men for white collar jobs but Oh! how we need good farmers!

3. It is possible to educate the masses of the people at a reasonable cost. — We have a technique and we can develop the leaders . . . Education has not kept pace with social change . . . A large majority of people stop their education just when they need it most.

4. There is abundant latent leadership among the people. We have never succeeded in getting the best brains to college. College graduates will meet in their own home towns men with greater native capacity than themselves whose parents have not been able to send them to college.

"If we are to have a great nation, the people themselves must do great things".

WHY FREE PUBLIC LIBRARIES FOR RURAL DISTRICTS?

Time was when the education of children was considered to be the sole responsibility of the parents. Then only the rich could afford an education for the children. Today such an attitude would be considered intolerable. The right of every child to an education is recognized in all civilized countries. In most of the Canadian provinces free education, inclusive of the high school grades, is now available. Many of the states and provinces on this continent even provide free tuition in the state supported universities at least for students in agriculture and home economics. "Adult Education", or education for those who have left school is now coming into its own and in some instances is securing a share of public support. And it is well that this is so, for illiteracy is a blot on the good name of any people and ignorance, particularly ignorance of public affairs, is a positive danger to the state.

The day is fast approaching when the provision of a free library service for all its citizens will equally be considered to be a public responsibility. Indeed, in many places, it has already arrived! Free public libraries are, of course, available in most of our larger cities and many of our smaller cities and towns. In the rural centres it is not nearly so common, though some provinces have made the necessary provision through the setting up of regional libraries. In some cases these are supplied by the government. In other cases the cost is met in part by the central government, while the counties of rural municipalities tax themselves for the remainder.

In Quebec this would be more difficult to effect, because of the existence of two language groups, which would naturally add to the cost. Yet something should be done! Democracy cannot remain strong and vigorous when learning is discarded with the school books. With free public libraries the ready availability of vital books on all sorts of subjects makes possible the self-education of the citizen and greatly increases his value to the state. The lack of knowledge of and interest in public affairs can in part be corrected by the provision of well chosen reading matter. Surely it is not a healthy condition when so many of our citizens lose the habit of reading at the seventh or eighth grade merely for lack of opportunity to exercise it! All those interested in better education, all those concerned with the perpetuation of the privileges we enjoy under our present system of government, should place their influence behind the movement to furnish the rural people with a public-supported library system.

DEPARTMENT OF AGRICULTURE

Agricultural Activities, Plans and Policies of the Quebec Department of Agriculture.

THE AGRICULTURAL MERIT COMPETITION

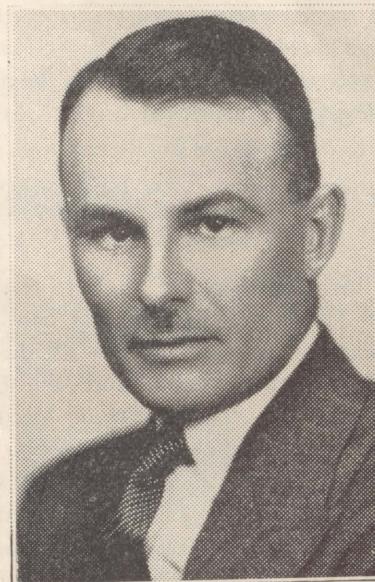
Since 1890 the Quebec Department of Agriculture has conducted the Agricultural Merit Competition. This is a contest for the best farms in the province, and is carried on to give recognition to those who attain the greatest success, and so that they will serve as shining examples in the various parts of the province.

For the purposes of this competition the province is divided into five sections, and for any one district the contest is held one year in every five. It rotates from section to section in such a way that there is one such competition each year and the whole province is covered completely in a five year period. This year the competition is being held in the counties around the Island of Montreal, namely, Huntingdon, Chateauguay, Beauharnois, Laprairie, Napierville, St. John, Jacques Cartier, Laval, Two Mountains, Argenteuil, Soulange, Vaudreuil, Terrebonne, and l'Assomption.

This competition differs from many others in that a complete analysis of the whole farm in all its aspects is taken into account, rather than only one or a few special parts. The comprehensive nature of the examination is shown by the main features that are judged. These are:

1. Type of farming — its suitability to the situation.
2. Houses and outbuildings — situation, condition, convenience.
3. Farm Buildings — appropriateness, condition, etc.
4. Machinery — suitability, state of repair, care.
5. Livestock — breeding, condition, production.
6. Cropping plan — suitability to farm and type of farming.
7. Farm and soil management — division of fields, drainage, tillage, freedom from weeds, manuring practices, fences, watering, etc.
8. Permanent improvements — roads, drainage, leveling and grading, stoning, etc.
9. Field crops — condition, yield, quality and suitability for the farm.
10. Special production — bees, poultry, pure seed, registered stock, fruit, or others.
11. Handicrafts — garden, canned products, ornamental or useful home articles.
12. Farm accounts — neatness and completeness, showing the financial situation of each branch of the farm operations.

Three classes of medals are awarded; gold, silver, and bronze. The gold medal is open only to those who have obtained a silver medal in a previous competition. It represents the highest honour available and can be attained



Mr. L. P. ROY, D.S.A.,
Deputy Minister of Agriculture.

only by farmers who have given concentrated and continued intelligent attention to the improvement of their farms over a period of ten years or more.

The silver medal is available to those who obtain a score of at least 850 points of a total of 1000. While representing not nearly as high an honour as the gold medal, it means that a good, high standard has been attained. The bronze medal is given to those who obtain between 750 and 850 points out of a total of 1000.

The judging of these farms is done by a competent committee. This year these judges are Dr. C. A. Fontaine, Oka, L. G. Fortin, Ste. Anne de la Pocatiere, R. Summerby, Macdonald College, F. Dufour, Ste. Martine, and Adelard Cartier, a former gold medallist. The judging was done during July and August and a report of the results of the competition will appear in the next issue of the Journal.

FAMOUS HERD ACQUIRED BY GOVERNMENT

The Ayrshire herd on Mr. E. C. Budge's Thorncroft Farms on the Island of Montreal is being dispersed. The animals have been purchased at a nominal figure by the Quebec Department of Agriculture and will be made available as breeding stock to the various agricultural schools and colleges in this province. This action is being taken so that the programme of line breeding which has been carried on by Mr. Budge during the past 25 years with such marked success shall be continued, to a certain extent at least, to the

general benefit of Ayreshire breeders of Quebec.

Many of our readers will be familiar with the performances of this herd at our fairs and exhibitions. The average production per cow is 11,800 pounds of milk; the average butter fat content 4.2 per cent. Some of the best families and strains of the Ayreshire breed are represented in the herd, namely, Thorncroft Star Nancy, Thorncroft Dairy Mabs, Thorncroft Cony, Thorncroft Brae Beulah, Thorncroft Brae Nosegay and Thorncroft Bright Ladyluck.

IMPORTANT CONFERENCES AT OTTAWA

Early in July a meeting of the National Advisory Committee on Agricultural Services was held in Ottawa and was attended by representatives of all the provinces. Mr. Adrien Morin represented Quebec and Dr. W. H. Brittain attended as the representative of Macdonald College. Reports of various national committees on barley and linseed flax, seed grain, sheep, feed, beef, weeds, soil surveys, etc. were heard and discussed. This was followed by a three day conference of Dominion-Provincial representatives held under the auspices of the Agricultural Supplies Board. Discussions of agricultural products and production problems of particular importance to the provinces concerned took place; these problems were keenly debated and much was done to clear up the present situation with respect to the disposal of various agricultural products. These discussions emphasized the difference between the situation existing now and that which prevailed during the first Great War. Then the cry was all for increased production — this time the emphasis at the conference was on surpluses and how to dispose of them.

The Wheat Problem

The situation with respect to wheat has received the widest publicity. With the carry over from last year, a new crop of close to 500 million bushels in sight, and allowing for the wheat necessary to feed our own people and to provide seed, there will be left over some 600 million bushels. It had been hoped to market 90 million bushels in France, but now that France has collapsed Britain and the home market are all we have left. Britain once took more than 200 million bushels from the whole world, and if she could take 150 million from us it would take four years to get rid of the surplus at present in existence or in sight. It cannot be expected that Britain will secure all her war-time needs in Canada. Three hundred thousand families are directly affected by this situation, which indirectly affects every family in Canada.

It is obvious, said the Minister of Agriculture, that you cannot treat this as a marketing problem. How can you have a Marketing Board to market something for which there is no market? It must, therefore, be treated as a war

problem. If Britain can hold her island fortress and continue to command the seas, she will eventually control the situation and may then have to arrange to feed Europe's hungry millions. Then we can get rid of our surplus. If Canada took over all the wheat at one dollar a bushel, it would cost more than the total cost of the war to Canada for one year. Obviously the cost to Canada must be kept as low as possible and still save the people who grow the crop. This is only one of the many responsibilities our government must face.

What about future plans?

There is a feeling that the Canadian farmer has not been given enough information and guidance to let him know just what was expected or wanted, and at the Conference it was stressed that this information was practically impossible to supply, since conditions have been changing almost daily. Information that could have been given out in the spring would have been of little or no use after the change caused by the invasion of Holland and Denmark and the collapse of France. The position of those trying to forecast events is not a happy one, but every effort will be made to keep the farmer in touch with the general situation.

The situation regarding certain commodities and some suggestions made at the Conference for future programmes are given below:

Apples. We do not know how many apples Britain will take, but the domestic market will likely have to absorb a large part of the crop. Ways and means of disposing of this year's crop are now being studied.

Bacon. The present agreement with Britain will expire on October 1st and until a new one is arranged no definite suggestions can be given. However, the needs will be known before the next breeding season.

Dairy Products. Great Britain will take all the cheese Canada can send this season. To supply this demand it may become necessary to stop exports of cheese from Canada to all countries not in the Empire, but the best way to make sure of enough cheese is for farmers to plan to have more milk to sell to the cheese factories. This can be done by supplementary feeding when the pastures are short, and by extending the factory season. Britain apparently does not want Canadian butter.

Eggs and Poultry. We have enough poultry in Canada now to supply all the eggs needed for home use and for export and measures may be needed this fall to sell all our marketable chickens. It is recommended that as much as possible be marketed at 4 to 5 pounds, finished to a quality of B milkfed or better, and that marketing commence early.

Fibre Flax and Seed. Our flax is proving an important contribution to Britain's war effort. With her usual sources of supply cut off, she has asked for all the line fibre, tow, and seed that we can supply. Equipped with improved ma-

chinery, now being made here, Canadian flax growers will be in an enviable position.

Live Stock Feeds. Tremendous quantities of coarse grains are on hand in Canada. There is a surplus of feeds in the Prairie Provinces and a shortage in British Columbia and in the East. It is hoped to get freight rates on feed grains in carlots brought into line with those now charged on grain for export. Feeders are urged to purchase at least a part of their needs early in the season, and before inland navigation closes. This will save the Eastern farmer transportation costs and help solve the Western storage problem.

Sheep and Wool. It would appear safe and good insurance for those already keeping sheep to add a few extra ewes to their flocks this fall, and for others who do not now keep sheep to buy a few. It is certain that there will be a continued demand for wool as long as the war lasts, though price levels are uncertain. Plans should be made not later than September to buy well-grown healthy ewe-lambs to be bred late in the fall.

BEEF CATTLE FIELD DAY AT COOKSHIRE

Eastern Township farmers show more interest in beef

THE second annual field day of the Quebec Beef Cattle Association which was held on August 8th attracted an interested group of farmers from the Eastern Townships and indicated a renewal of interest in beef cattle by those present.

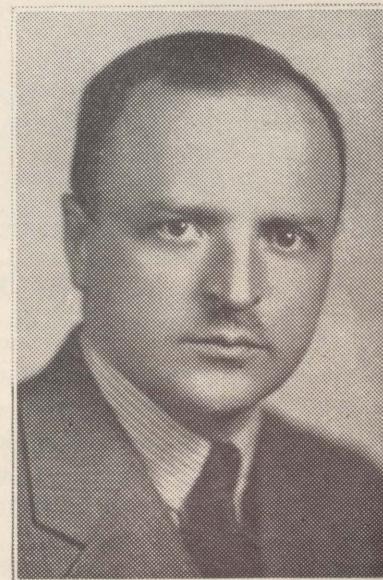
A splendid programme of judging competitions, demonstrations, and talks on better beef farming methods was carried out, Mr. L. C. Roy, President of the Association, being in charge. In the morning the main events were a judging competition for junior farmers, and a demonstration by Prof. L. H. Hamilton of Macdonald College of breed type, using animals from the herds of C. D. French, W. A. Hodgeman and the Experimental Farm at Lennoxville. In the afternoon a judging competition tested the knowledge of breeders, first prizes being a selected bull calf of each breed. The Shorthorn calf offered as a prize came from the herd of H. B. Norris, Georgeville; the Hereford from C. D. French, and the Angus from Mrs. MacKay, Danville.

In the afternoon speakers included Wm. Duffy, M.L.A., R. Dionne, Chief of the Livestock Branch for the Department of Agriculture, and Col. Burchall, Vice-president of the Ontario Hereford Breeders' Association, who brought greetings from that province. Mr. R. G. Graham of the Ontario Department of Agriculture discussed beef farming in Ontario, emphasizing the importance of growing good crops, selecting good animals and following proper feeding rules, mentioning especially the importance of succulent feeds such as silage and roots. The most successful farmers in Ontario, he claimed, were those who grew most of the feed they required.

Mr. P. E. Sylvestre of the Central Experimental Farm gave an interesting talk on the results of experiments at Ottawa, and the final item was a demonstration by Dr. J. M. Veilleux of artificial insemination, which was watched with interest.

Prize winners in the various events were as follows: Junior judging competition: Gordon Kirkpatrick, Bury; Clayton Gray, Bishopton; Irwin Watson, Bury; Malcolm McCaskill, Bury; Fernad Theroux, Coaticook.

Senior judging competition: *Shorthorn class*, Patrick Tardiff, St. Methode; Gordon Kirkpatrick, Bury; Leo Cameron, Springhill. *Hereford class*, Irwin Kirkpatrick, Bury; C. D. French, Cookshire; Tom Kirby, Cookshire. *Angus class*, John McKellar, Magon; W. F. Hadlack, Iron Hill; George Vezina, St. Patrick.



Mr. ADRIEN MORIN, B.S.A.
Chief, Animal Husbandry Branch and
Acting Deputy Minister of Agriculture.

THE PROVINCIAL FEED BOARD

One of the services of the Quebec Provincial Feed Board to the feeders of Quebec Province is the publication each year of a booklet in which their recommendations concerning livestock rations are given. The fact that this bulletin, entitled *Balanced Rations*, is revised each year insures that the information contained will be up to date. The booklet is free to farmers on application to any Agronomist or by writing to the Livestock Branch of the Quebec Department of Agriculture. The 1940-41 edition will be ready for distribution in September.

In this new edition will be found information on such matters as: the new grades of feed barley, salt and water requirements of animals, red vs. white salt, the feeding

value of screenings, expeller vs. extractor process soybean oilmeal, tankage vs. meat meal, etc. Information on such questions is constantly increasing and is therefore of current interest and importance to livestock feeders.

GETTING RID OF THE CORN BORER

In accordance with the provisions of the Plant Protection Act, all corn growers, before October 20 on the Island of Montreal, Ile Jesus and Ile Bizard, and before June 1 in other parts of Quebec, **must**:

1. Destroy all remnants of the previous crop — stalks, cobs, leaves and stubble.
2. Plow under all roots and stubble so that they are completely buried.
3. Remove all weeds anywhere on the farm where the corn borer might breed.
4. In spring, destroy all corn debris brought to the surface by the harrow or otherwise.
5. Report any new infestations of corn borer to the Minister of Agriculture.

The government inspectors have full power to enforce these orders and anyone refusing to carry them out will be prosecuted.

CHEESE FOR THE BELLEVILLE EXHIBITION

The National Exhibition at Belleville will be held December 2, 3 and 4, and it is time for those who intend to exhibit Quebec cheese to start their preparations. This fair will be a splendid chance to advertise the products of our cheese factories and to get new markets for them, and as many cheese-makers as can do so should arrange to exhibit. Quite apart from the advertising value, the prizes offered are attractive, and the entry fees are reasonable — \$1.00 for the first entry and 25c for each other entry. Entry forms may be obtained from the inspector.

Cheeses for the exhibition are to be sent to the Co-operative Federee, 130 St. Paul St. E., Montreal, where they will be carefully stored until sent to Belleville. Each box should show the exhibitor's registration number, date of manufacture and weight, and be clearly marked "cheese for exhibition". No other identifying marks are allowed. The cheeses should be well packed so that they can be safely shipped; boxes should be reinforced and each cheese should be well wrapped. Transportation charges to Belleville will be paid by the Government.

The Sherbrooke Exhibition

AGAIN this year the weather man favoured the Sherbrooke Fair with fine sunny days, but the attendance of both exhibitors and spectators was down considerably from last year. The same has been true of all fairs this fall. This may be attributed in part to the short time available for preparation, since there was some doubt early in the summer whether the fairs would be held or not; to reductions in grants and prize money; and to the unsettled conditions due to the war situation. In Sherbrooke, many of the factories which usually close for a half day during Fair week worked right through, and this doubtless had its effect on the gate receipts. For one reason or another, some of the exhibitors who are usually present did not show this year.

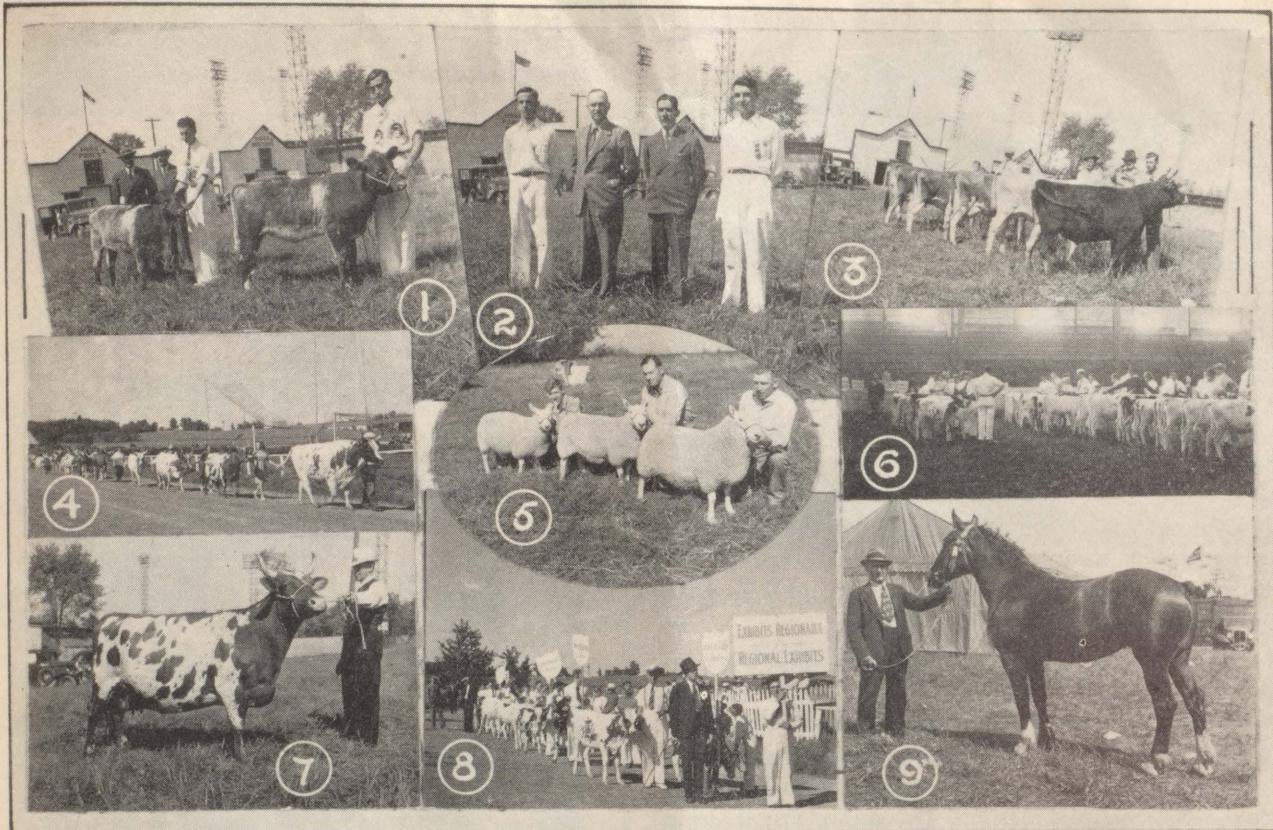
The junior competitions are always a feature at Sherbrooke—in fact, it was here that organized junior competitions were started—and there was a splendid turn out of representatives of the Junior Calf Clubs, in all 134 enthusiastic young farmers of tomorrow. Eighty of these, representing 29 local clubs, were exhibiting; 18 teams were entered in the junior judging competitions in the dairy section and 8 in the swine section. Two girls were entered among the Regional exhibitors and two others in the judging competitions. Mr. J. P. Fleury who was in charge of the juniors expressed himself as very well pleased with the splendid showing of young Ayreshires. While there were no outstanding animals, the showing was very uniform and

the interest shown argues well for the future of cattle breeding in Eastern Quebec.

Live stock exhibits at the fair were good, but considerably smaller than last year except in Jerseys; in this breed there were 49 animals out this year compared with only 29 last year. Ayreshires had 64 out this year and 62 last year, but Holsteins were represented by only 50 as against last year's 75. In Canadians there were 46 this year whereas last year brought out 59.

Holsteins were judged by D. A. McPhee and most of the championships went to W. Verville of Arthabaska. His Montvic DeKol Barno was senior and grand champion male, while he also had junior champion male on Des Rives Suzon, and junior and grand champion female on Belle Inka Abbekerke. Verville also took a first with his senior herd and second with his junior herd. In addition he had 12 first places, 3 seconds and 1 third. This is his second year of showing at Sherbrooke with his whole herd. J. B. Beaulieu had reserve grand champion male with Gallant Pietje Inka and W. H. Burton took the senior female championship on Baroness Mercedes Francy.

Judging the Ayreshires was J. A. Black and in this breed J. H. Montgomery, Philipsburg, was the outstanding exhibitor. There was one very good animal in every class and the heifer classes were particularly good. Montgomery



1. Junior exhibitors; 2. The winning judging team; 3. J. L. Dion's prize Jersey herd; 4. Part of the livestock parade; 5. Some of Snaden's prize Cheviots; 6. Junior exhibitors in the Arena; 7. Montgomery's Grand Champion Ayrshire; 8. Regional junior exhibitors; 9. Lavallée's champion heavy draught mare.

had senior and grand champion male on Auchinbrane Charmer, and the junior champion on Lakeside General Butler. Reserve junior went to Hyde and Son on Maple Centre Charmer. Grand and senior champion female also went to Montgomery on Cauldham Catherine, and so did junior female on Lakeside Enchantress. Hyde and Son had reserve grand champion on Maple Centre Princess. Montgomery also took firsts in both senior and junior herds, other exhibitors being Hyde & Son, South Durham, B. Lavallee, Roxton Falls, L. A. Skillen, Danville and the Benedictine Fathers.

The herd of Elmo Ashton was missing this year among the Jerseys, which were judged by A. R. Ness. First prize for the senior herd was taken by J. L. Dion of East Farnham who also had the reserve grand champion male on Fibrant Byron, junior champion male on Greenwood Wonder Nicholas and the junior champion female on Pine Park Diana. Senior and grand champion male went to Edgar Smith of Danville on Grayburn Sybil's Observer 2, while E. C. Rose of Sherbrooke had senior and grand champion female on Langdon Hall Edythe.

The Canadian entries were judged by A. Morin and the winning senior herd was that of Arthur Beauregard of North Stukeley. Edmour Gaucher of St. Valerien carried off the honours among the junior herds, and other exhibitors were O. A. Fowler, Kingsbury and Eug. Marcoux

of Coaticook. The male championship was contested by two sons of Bennett of Ferme Centrale, a bull once owned by G. A. Beauregard, and was won by Tixandre Ferme Centrale, who was senior and grand champion for Jos. Desmarais of Richmond, who also had the reserve grand champion. Junior champion male was Bourdon des Rapides for E. Gaucher. Senior and grand champion female went to A. G. Beauregard on Brunette Ferme Centrale; O. A. Fowler had the junior champion on Lone Oak Sally.

Among sheep exhibitors Harold J. Snaden of Danville had little competition with his Cheviots, placing first in all but one class. Pope and Son of Coaticook and A. N. Deacon of North Hatley were other exhibitors in this breed.

Competition was keener in Leicesters, Slack Bros. of Waterloo winning 11 awards, with John H. Pibus, Knowlton, N. L. Cameron and Mrs. J. Parnell, Lennoxville, and Geo. Lavallee, Bromptonville, taking 7 each. Pope & Son, H. J. Snaden and Frank Stalker, Kingsbury, also exhibited. W. H. Burton of Waterville won the major awards for Hampshires. The sheep classes were judged by L. H. Hamilton.

Honours in the swine classes were divided between John Nichol and Son of Lennoxville and Edmour Gaucher of St. Valerien, both taking four first places. A majority of the second prizes was won by Ste. Marie & Fils of Compton. X. N. Roderique was the judge.

THE COLLEGE PAGE

Items of news regarding the College, staff members, students and graduates.

Registration for 1940-41

In spite of the war situation and the fact that many men who might otherwise have come to college are in His Majesty's Forces, indications at the moment of writing are that the numbers of new students at Macdonald College this session will be fairly satisfactory. Some students who were at college last year have enlisted. We do not know exactly how many of these will not be returning. But in view of the need for trained men in the future, we hope that as many as possible will complete their college careers.

Students in the School for Teachers registered on September 4th and are settling down into the routine of college life. Homemaker students came in on the 11th, and the students in the degree courses in Agriculture and Household Science will register on September 27th.

Military Service

All college students will be required to put in 6 hours of military training each week during the session 1940-41, and this will be accepted in lieu of the required training under the National Mobilization. This means that students will be able to fulfill their military obligations without losing time from their studies. The training will be done during the day and will involve no extra study outside of drill hours.

This "basic training" will be carried out under the officers of the C.O.T.C. but will carry no academic credit. The regular C.O.T.C. work will be continued as usual, but the only recruits that will be accepted in this course will be those who have already had a sufficient amount of military training. For these men credit to the extent of one full course may be arranged.

The authorities are urging all young men who are in college, or who are planning to attend college, to finish their education; the only exception to this recommendation is for those who intend to join the Royal Canadian Air Force.

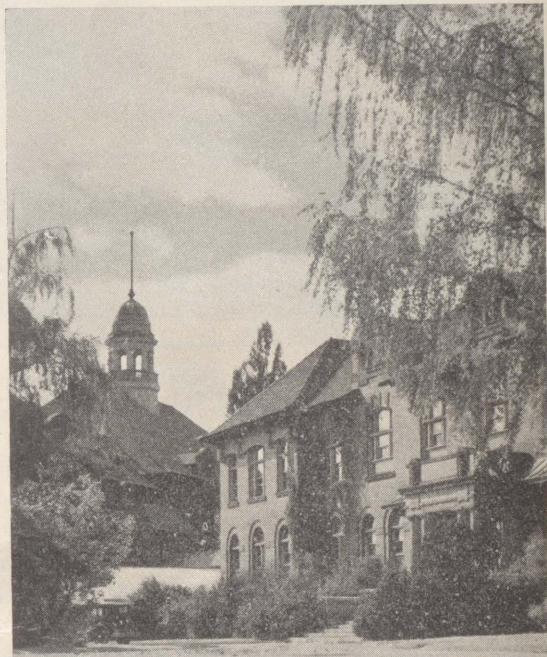
The Diploma Course

The two-year Diploma Course at Macdonald College will begin this year on November 4th. It will last until March 29th, and farm boys who take advantage of this chance to learn about the newest farming methods will be home in time to start the spring work.

It does not cost much to spend two years at college and the advantages are many. The students get a practical education in agriculture. They not only learn how best to do certain things, but also why. They learn about new varieties, new feeding methods, better cropping practices, and in addition to this, they make a wide circle of acquaintances

among the staff and the other students, and build friendships which will endure all their lives. They take part in many social and athletic activities and learn to adjust themselves to group enterprises.

Two winters spent in the Diploma Course at Macdonald College will play a large part in giving that "extra something" which will be needed by our rural leaders of tomorrow. It is an opportunity which should be taken advantage of by all those who can possibly do so.



NEW SESSION BEGINS

Fred Thatcher, B.S.A. '33, Ph.D. '39 has been at the University of Minnesota on a Royal Society Fellowship for the past year. He is now back at the Botany Division at Ottawa.

Henry "Hank" Griffiths, B.S.A. '32, Ph.D. '39, is on the staff of the Department of Veterinary Pathology, Iowa State College.

W. E. Lindsay, '29 and Ed. Snilner '36 are in partnership in the hog raising business at Ste. Flore, Que. Mr. Lindsay writes, "We have increased our piggery to double its size again and are progressing favourably."

Don Smythe, '36, is with Canada Packers at Toronto. He was married early in August to Madeline Veith.

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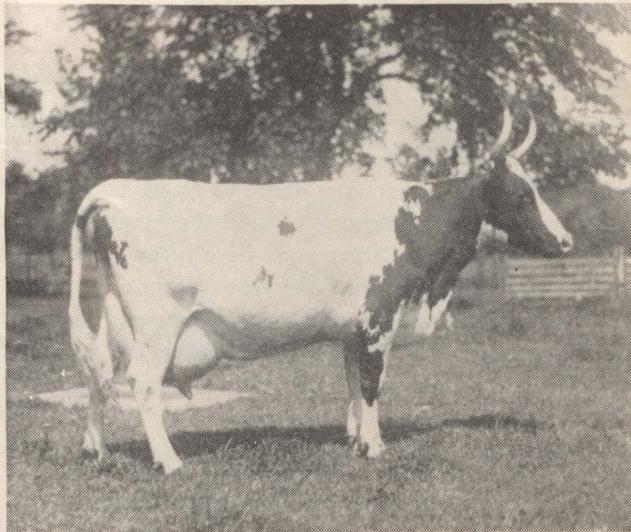
The highest value in spreader, it is the pioneer of the lightest manure spreader in the country. "Own your own SPREADER this year."

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A World's Record

Macdonald Dorothy's last R.O.P. record, finished when she was sixteen years of age, was 17,915 pounds of milk containing 857 pounds of butter fat. Her total life production in ten lactation periods was 171,996 pounds of milk containing 7,309 pounds of butter fat, with an average test of 4.24 per cent. She was the first Ayrshire to pass the 7000 pound butter fat mark and no other cow of her breed has passed her life-time production record.

Macdonald Dorothy was bred and developed by the Animal Husbandry Department at Macdonald College, and died late last fall. Of her ten offspring, seven of which were sons, the youngest son is in service in New Zealand and the oldest son, now fourteen years of age, is still in active service in the Province of Quebec.

Fatten Poultry Meat Stock

All poultry meat stock should be fattened in confinement, either in pens or in crates. Feed a mixture of at least three ground cereals such as corn, wheat, oats or barley, to which should be added either liquid skimmilk or buttermilk to make the mixture thin enough to run freely from a pail. Feed three times daily in troughs and remove any feed not taken by the birds in half an hour. The length of the fattening period should be at least fourteen days. Highest market prices are paid for milkfed dressed poultry.

Succulent Range Forage Essential for Maturing Pullets

Green pasture grasses, clover or alfalfa are essential to normal maturity in pullet stock. A good pasture will reduce feed costs in rearing the poultry flock. When mature pullets are housed it is necessary to provide fresh green food in the pens during the fall months. If fresh green foods are not available, provide good quality clover or alfalfa hay. The quality of the egg produced depends on a well balanced diet which should include green foods.

The Larger School Unit

Continued from page 11

In Ontario 4 or 5 units were established under permissive legislation in 1937. This number has now increased to over 80. So the idea is not new. In none of the above mentioned places is there any desire to go back to the old organization. Many of those who objected strenuously to the establishment of these larger units have become convinced of their superiority over the older type of organization.

Objections were raised on account of supposed increased cost. To increase cost was not the intention, but rather to get better educational service. It would be rash to state that an enlarged educational unit would never spend more than the present total spent by the various boards out of which the unit is created.

Lower Cost

Alberta's experience is interesting. During the year 1937 the cost of all the 11 larger units then in operation was more than 7½% less than the cost in 1936, under the different boards. More than this, however, the community received better educational services. Every scholar who wished to do so could attend a high school without the payment of fees. A beginning was made in adding new departments to high schools, such as shop work, home economics, stenography and all this at a decreased cost. In many places within the unit taxes were lowered, in some they were raised.

Objections have been made to such a scheme in Ontario to the effect that under the proposed scheme the interest taken by local boards would be lost and that the central board would be too impersonal in its dealings with local communities.

Local Boards Retained

Inasmuch as there is no idea of abolishing the local boards this objection cannot be altogether valid. On the other hand, experience elsewhere indicates that it might result in a broadening of local interest. Ratepayers and their local school boards would acquire an interest and measure of control over, not only their small one-roomed elementary school, but over high and intermediate schools.

Legislation Pending

Several years ago the Protestant Committee caused to be drawn up a bill dividing the province into large areas for administration purposes. A similar scheme was endorsed by the Protestant Education Survey Committee (1931) in the so-called "Hepburn Report"; This scheme, however, differed in some respects from that of the Protestant Committee, principally in the part that larger administration units were recommended. The bill sponsored by the Protestant Committee was ready to be laid before the legislature during the last session, but has been temporarily held over. It would seem, however, that the principle of

the bill is in line with the modern trend, and that the passage of some such legislation would make a really worthwhile advance in the present educational system, especially in the rural sections of the province.

At the present time many rural people who desire more than an elementary education for their children pay taxes in the form of fees to schools over which they have not the slightest control. Moreover, many more rural children would have an opportunity of such an education than at present.

Space does not allow discussion of other points, but before the idea is dismissed it should be carefully studied by rural groups interested in the continued welfare of their own families and their own communities. While it is quite true that the idea behind the present bill is educationally progressive it may be that the bill itself is not the best possible. It is suggested that the school boards study it both singly and in groups, and that other rural organizations give it their careful attention. It is certain that the Protestant Committee would welcome worth while and constructive suggestions coming from those who should be most interested in as excellent an educational system as is possible to devise.

The continued welfare of Protestant Rural Education and of every individual Protestant family will be affected by the attitude taken towards the underlying principle of this bill.

[Write to Macdonald College for a discussion outline on this topic, prepared especially for study groups. Price 10c.]

ED. NOTE.]

RED CROSS APPEAL

The Red Cross is appealing to all women who can do so to preserve, or can, all surplus fruits and vegetables this season.

With so much suffering and hunger among the unfortunate victims of the war, we must see that none of our crop of these items is allowed to go to waste, and the Prime Minister urges everyone to respond to this appeal as generously as they did to the demand for knitting and sewing.

Containers to be used will be furnished by the Red Cross Society. Write to: The Red Cross, 92 St. Peter St., Quebec P. Q.

A new booklet which tells what Canadian doctors suggest for wholesome meals at low cost may be had free by writing to the Women's Institute Demonstrator, Macdonald College, Que. It is prepared by the Canadian Medical Association and gives food lists for families of different sizes, how to select *your* list, and suggestions for meals. It also has a few shopping and cooking hints.

Improvement of the Meadow

Continued from page 7

down into the soil about the roots of the plants where it is needed and where it will not interfere with the use of the meadow for mowing or grazing in the following year. When fresh manure is used it may be better to cut the straw used as bedding. This will make the manure easier to spread and the straw will disappear more quickly after the manure is applied.

Use of Lime and Fertilizers

There are parts of Eastern Canada where manure alone is not sufficient to ensure improvement of the meadow. Where the soil is medium to strongly acid, the additional use of lime may be required. To be most effective the lime should be applied in the fall on plowed land intended for seeding down in the following spring. This enables it to become well worked into the soil during the preparation of the land for seeding where it is much better placed to help the growth of the new seeding than if it is applied as a top-dressing.

Some form of commercial fertilizer, such as superphosphate, may also be needed. A commercial fertilizer gives the best results when it is drilled into the soil at the time of seeding by means of a fertilizer drill. When used for the first time on a field, the lime should be applied at the rate of about two tons of ground limestone per acre and the superphosphate at about 300 pounds per acre.

If a farmer uses the manure produced on the farm to the best advantages, with or without these additional treatments according to the soil requirements, it should be possible to improve greatly the amount as well as the quality of the home-grown feed.

Save Breeding Cockerels of Good Body Type

Uniform size and shape of body in the poultry flock depends on the sire used in the breeding flock. For breeding use save only those males which come from good egg-producing families and possess well proportioned bodies. Do not use males having too long legs and bodies. Select only those males having bodies plump in fleshing in leg and breast and displaying a vigorous appearance.

During the last century the use of sugar has been greatly overdone. Today we use on an average four times the amount suggested by nutritionists as a reasonable maximum. Sugar provides no protein, minerals or vitamins. It does not promote growth or build muscle, teeth, or bones. It only gives energy, and flavours the diet. The wise meal planner will use sugar only in moderate amounts as a "bait" in puddings, custards, etc., just as Nature has done in milk and fruits. The sweet flavour is pleasing, but many minerals and vitamins are eaten at the same time.



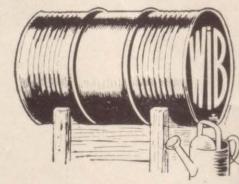
BORROWING to keep your farm in good working condition should be *profitable*; it is a *constructive* use of credit.

Our managers are familiar with the needs of farmers and they welcome applications for loans having a constructive purpose.

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THE remarkable increase in the past few months of the use of molasses in grass ensilage is one more tribute to the value of molasses in stock feeding.

Booklets on all phases of molasses in the feeding of stock available on request.

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WE THANK YOU

THIS is the first regular issue of the Macdonald College Journal. The introductory number which we published in July has brought us some very complimentary letters. For example, Mrs. Hugh Savage writes us from Lemesurier; "I have received a sample copy and think it contains so much of general interest; I believe the majority of farmers after reading it would subscribe." Mr. Paul Gingras, Missoquo agronomist, says; "Every farmer I meet subscribes readily."

Comments such as these are very gratifying, but constructive criticism will be welcome also. We want the Journal to be of interest to every member of the family, and if you have any suggestions, send them to the Editor. We will be glad to print news of the doings of your society if your secretary will send it in to us.

If you like the Journal why not tell your friends? Our subscription list is growing rapidly but still is short of what it must be to assure the continued success of the magazine. Some Women's Institutes are subscribing for their members and paying for it out of their Institute funds. We pass this bit of information on in case your organization might like to do the same. See your local agent or send your subscription direct to the Circulation Manager, Macdonald College Journal, Macdonald College, Que.

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POMOLOGICAL SOCIETY MEETING

The Quebec Pomological Society held its summer meeting on August 21st at the farm of the Oblate Fathers at Rougemont, where the members had a chance to see some of the fine orchards of that district. A visit to a plant where apple juice is processed was included in the programme, and the visitors could see for themselves just how this increasingly popular beverage is prepared.

What About the 1940 Crop?

At the meeting the question of how to dispose of this year's apple crop was discussed from all angles. The crop of early varieties will likely be only about half that of last year and no great difficulty should be met in disposing of it. Late varieties, given good weather, should be about the same as 1939. In Nova Scotia and Ontario, prospects are for a considerably smaller crop than last year's—perhaps 40% less.

It is not known yet just what steps will be taken by the Dominion Government to help dispose of the crop, but a campaign will certainly be launched to try to increase the use of apples. It is not likely that the zoning system tried last year will be repeated. For each dollar raised by the Society for advertising purposes, the Provincial government has agreed to contribute an equal amount up to a maximum of \$1,500.00, and almost this amount was pledged on the spot at the meeting.

Change in Grading Regulations

A resolution was adopted at the meeting asking the Provincial government to amend the grading laws to prohibit the sale of Grade 3 apples on the city markets. This would have the effect of preventing our markets from being flooded by poor quality apples from other provinces, and an appeal has been made to all growers to follow the new regulation strictly.

In spite of the many new cars, trucks and tractors that are being bought annually, the horse population in Canada is increasing. There were 2,824,360 horses in this country in 1939 as compared with 2,820,700 in 1938. We are getting more work done in Canada by using more horses as well as more tractors and trucks.

In the past three years all the machinery and parts bought by 741,600 Canadian farmers has averaged less than \$53.00 per farm per year.

Many farmer car drivers have a habit of swinging wide to the left on the highway before they make a right turn into a farm lane. This practice is unnecessary and dangerous.

Rubber belts should be run with the white seam on the outside, that is, not next to the pulley. Leather belts should be run with the smooth side (the hair side) next to the pulley. The flesh side is more flexible and therefore can stretch when going over the pulley.



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*When you drink BLACK HORSE ALE you are supporting the Brewery that supplies the famous Black Horses to the Farmers. During the past five years, 14,000 foals in addition to \$30,000 in prize money have come to the Farmers through the services of these Black Horses

Dawes Black Horse Brewery, Montreal